

Remarks

The Applicant has cancelled Claims 1-5 and added new claims 6-11. Thus, Claims 6-11 are currently pending.

The Applicant has amended the Specification to place it into conformance with U.S. Rules of Practice. Entry into the official file is respectfully requested.

Claims 4 and 5 stand objected under 37 C.F.R. 1.75(c) as being in improper form for being a multiple dependent claim depending on another multiple dependent claim. Claims 4 and 5 are herein cancelled. The Applicant accordingly requests withdrawal of the objection.

Claims 1-3 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication No. 2003/0195885 by Emmick et al. ("Emmick") in view of US Patent Application Publication No. 2002/0021828 by Papier et al. ("Papier"). The Applicant respectfully requests reconsideration and withdrawal of the rejections.

Claims 1-5 are herein cancelled. New Claims 6-11 are introduced to more clearly recite the features presented in now cancelled Claim 1-5 and do not introduce new matter. Independent Claim 6 recites a process for organization of a relational database. The process includes "providing a table of hierarchical expansion, the table including at least one column and at least one primary key, wherein each line of the table has a line index." Claim 6 further recites "creating a thesaurus for each column of the table" and "determining a set of line indices for each word of each of the thesauruses, wherein the set of line indices is comprised of each line index of the line at which the word appears in the table." A radix tree comprised of the set of line indices for each word of each of the thesauruses is created. The process of Claim 6 further includes "storing both a sequence of its values and a permutation on the set of values" for each of the at least one primary keys.

Emmick is directed to representation of content graphs in a relational database by defining nodes and edges of content structures as entities in the database. Emmick, with reference to Figure 4 and paragraph 56, teaches the conversion of a document represented by a table of contents into relational tables. The table of contents may be represented by a graph composed of nodes and edges. In the graph representation, the nodes correspond to content and structure of the table of contents, while the edges represent the relationship of titles in the table of contents. Information related to the nodes forms one relational table, and information related to the edges forms a second relational table.

Papier is directed to organization of characteristics, hypotheses, and their relationship to one another in a form of a database. The database may be used as a diagnostic aid. A knowledge database, formed of multiple relational tables, is the basis of Papier's diagnoses system. The multiple relational tables represent various icons, text, and images. The knowledge base is used to translate user selections into queries and outputs. (Paragraph 66). Examples of relational tables are shown in Figure 4. The rejection references the synonym table, the relationship table, and the term table, described in paragraphs 78-80 of Papier. The synonym relational table includes professional terms, lay terms, and foreign language terms. The synonym table is a meta-dictionary/thesaurus that accommodates multiple versions of an end user application. The relationship table is used to create a network of concepts to allow for searching in hierarchical trees. In the term table, concepts are associated with associated terms and synonyms to facilitate natural language processing of words within the end user tool and database.

However, neither Emmick nor Papier teach organization of a relational database as recited in independent Claim 6. While Papier discloses a synonym table that is used as a thesaurus for a diagnosis tool, Papier does not disclose determining a set of line indices for each word of the thesaurus, the set including each line index of the line at which the word appears. As the set of line indices is not taught by Papier, Papier also cannot and does not teach using the set of line indices to create a radix tree. In fact, Papier does not disclose any type of radix tree whatsoever. Papier teaches a table that creates a network of concepts and a table that associates terms, but there is no disclosure of a radix tree for the network or association described by Papier. Emmick, as acknowledge in the Rejection, is also silent on the creation of the radix tree as defined by Claim 6.

Additionally, neither Emmick nor Papier teaches storing, for each of the primary keys, a sequence of its values and a permutation on the set of values. Emmick discloses use of the Dublin core to form a quick physical index scheme but nowhere discloses a sequence of primary key values and a permutation of those values, used to find a given value, as recited in Claim 6.

The Applicant respectfully submits that the above differences set forth with respect to Emmick and Papier are such that combining Emmick and Papier fails to result in the claimed process of independent Claim 6 and its dependent Claims 7-11. The Applicant respectfully submits that the pending claims are allowable over Emmick and Papier.

In light of the foregoing, the Applicant respectfully submits that Claims 6-11 are in condition for allowance, which is respectfully requested.

Respectfully submitted,



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